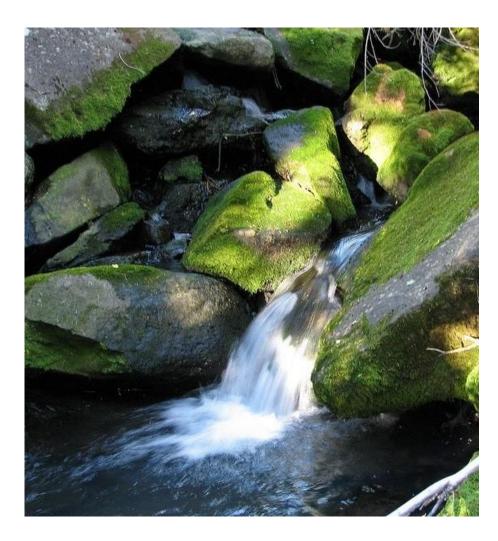


Controls and Service Budget UW Living Wall



Controls Budget For:

Nancy D. Rottle, RLA, FASLA Professor, Department of Landscape Architecture Director, Green Futures Research and Design Lab Scan Design Endowed Chair in Built Environments Adjunct Professor, Departments of Architecture and Urban Design and Planning College of Built Environments Box 355734 University of Washington Seattle, WA 98195-5734

Local Trane Office:

Trane U.S. Inc. dba Trane 2333 158th Court NE Bellevue, WA 98008

Local Trane Representative: Brian Lee

Account Manager Cell: (206) 681-8771



Scope of Work

Trane's approach to this project is one that keeps costs down while providing a fully functional controls system that maximizes reliability and flexibility. Trane will use our Tracer SC+ BACnet IP web interface system controller for state of the are remote access to the Living Wall. Tracer SC+ is web enabled and can be accessed by any authorized user that is connected to the internet without the need for additional software and has user log in credentials. The Living Wall equipment will be fitted with Trane UC series programmable controllers that will communicate using BACnet technology. Trane will provide customer training to ensure that all authorized users are capable of navigating and operating the Tracer building automation system. Our goal is an unparalleled user experience.

Controls systems and equipment

- Tracer SC+ Facility Controller with Synchrony Interface
- Fully Programmable BACnet Panels/Controller for full automation of the Living Wall watering system

Controls systems services included

- Control wiring and component installation
- Dedicated Project Management
- Engineered Control Submittals and As-Built Drawings
- Control System Programming
- Control System Point-to-Point Checkout
- Factory generated 3D Graphics
- Owner Control System Operational Training (one 4 hour training session on site)

Annual Service included (Scope includes eight (8) monthly remote inspection and four (4) quarterly

onsite inspections)

- Remote monthly inspections to ensure operation of the system
- Onsite quarterly inspections to test functionality of the Living Wall system

Control systems services not included

- Power Wiring & Conduit (except power to our controllers which Trane *will* cover)
- Air and water balance assistance
- Any temporary controls
- Repair or replacement of any equipment being controlled

Proposal Notes/ Clarifications

- All work to be performed during specified working hours normal business hours (7am to 7pm, M-F, nonholidays)
- Proposal does not include "Premium Time" or Price Contingency therefore
- IT requirements including network access will be the responsibility of owner
- Equipment Order Release and Services rendered are dependent on receipt of PO/Subcontract and credit approval
- Controls for any systems not listed above are excluded
- Trane will not perform any work if working conditions could endanger or put at risk the safety of our employees or subcontractors
- Controls warranted for one year after project completion and acceptance
- It's assumed all the existing automation end devices are in good working order and will be reused



Budget Pricing

Controls System Price

Total Net Price (Excluding Sales Tax)	\$ 18,130.00
Annual Service Price	
Total Net Price (Excluding Sales Tax)	\$ 7,920.00

Financial items not included

- Applicable sales tax or use tax is excluded
- Bid Bond
- Payment and Performance Bond
- Liquidated Damages
- Demurrage or Storage Charges
- Participation in OCIOP or CCIP Insurance Programs

Respectfully submitted, Brian Lee Account Manager Trane U.S. Inc. dba Trane (206) 681-8771